

ELMO

ENGLISH

ESD-380

User's Manual

HEAVY DUTY MODEL



Before attempting to connect or operate this product, please read these instructions completely.

CONTENTS

PREFACE	2
FEATURES	3
PRECAUTIONS	5
QUICK STARTING	6
FUNCTION DEFINITION	6
QUICK START FROM ESD-CC1 KEYBOARD	7
SWITCH SETTING	9
SWITCH DEFINITION	9
ID Setting	9
Dome Control Protocol	10
RS-485 Setting	10
INSTALLATION	12
CONNECTION	17
CABLE CONNECTION	17
22-PIN CONNECTOR DEFINITION	17
RS-485 Connector	18
OSD DISPLAY FORMAT	19
OSD DISPLAY FORMAT	19
SPECIFICATIONS	20
SYSTEM ARCHITECTURE	21
SYSTEM ARCHITECTURE	21
APPENDIX - OSD MENU	22
OSD TREE STRUCTURE	22
OSD MENU	25
MENU ITEM	25
APPENDIX - PELCO	32
SYMBOL DEFINITION	32
SPECIAL FUNCTION	32
USING “PELCO KB” CONTROL DOME CAMERA	32
APPENDIX - PHILIPS ALLEGIANT	34
SYMBOL DEFINITION	34
SPECIAL FUNCTION	34
USING “ALLEGIANT KB” CONTROL DOME CAMERAS	34

PREFACE

The speed dome is a new subcompact dome camera system designed to deliver superb performance and durability with a pristine housing that looks good in any security and surveillance installation.

This speed dome contains new generation advanced DSP color camera, with 22X optical zoom multiply 12X digital magnifier (23X optical zoom with 12 digital magnifier are selectable items), delivers the power of a 364X zoom (276X zoom) to make sure that the finest details are captured. Continuous auto focus, back light compensation, auto iris controls, IR cut filter removable, privacy mask functions (IR cut filter removable and privacy mask functions are not included in 22X lens) are some of the salient features incorporated to fit your needs.

High speed tilt and 360° endless rotation and auto flip function allows this speed dome to be installed in the most demanding applications. RS-485 communication channel is available for remote control purposes, 128 preset points can be programmed for precise location of target areas, and you can also define multiple cruise routes for the camera to operate automatically.

Home function allows the user to specify a preset position as the 'home position'. Dome camera can come back to home position when the user stops to move the camera for a while.

Dependability and ultra high reliability are key factors in the speed dome design cycle. Every speed dome is assembled with meticulous care and thorough testing at our ISO 9001 compliant factory. High performance, reliability, and reasonably pricing, this speed dome is an ideal solution to your tough surveillance requirement.

FEATURES

CAMERA FEATURES

1. Optical performance:
 - (1). DR model: 23X optical zoom with 12X digital magnifier.
 - (2). S model: 22X optical zoom with 12X digital magnifier.
2. Continuous Auto-focus or manual focus
3. Minimum illumination:
 - (1). DR model: 23X lens: 0.01 lux (0 lux: IR illuminator ON)
 - (2). S model: 22X lens: 1 lux
4. Advanced DSP camera provide:
 - (1) Auto white balance
 - (2) Back-light compensation
 - (3) Auto iris control
 - (5) IR-cut filters removable mechanism. (DR model only)
 - (6) Electronic shutter
5. **Slow Shutter** function enable dome to gain a brighter video output through shutter speed control. (DR model only)
6. **Title Display** function enable dome to display a string for a view. The title will be displayed on screen if you pass through the region what you saved before.
7. **IR-Cut Filter Removable :**
 - (1). DR model: 23X lens: Equipped
 - (2). S model: 22X lens: N/A
8. **WDR**
 - (1). DR model: 23X lens: Equipped
 - (2). S model: 22X lens: N/A
9. **Privacy Mask**
 - (1). DR model: 23X lens: Equipped
 - (2). S model: 22X lens: N/A

ROTARY BODY FEATURES

1. 5" compact, low profile color dome camera
2. 360° endless rotation
3. Pan speed up to 375° /sec
4. Tilt speed up to 300° /sec
5. **Preset** function enable user to record different 128 viewpoints what you want. You can set Pan/ Tilt/ Zoom for every preset position.
6. **Proportional Zoom** enables Pan/ Tilt speed inverse proportional to zoom ratio. You can track an object easily with this function.
7. **Auto-Turn Around** function allows user to keep tracking object even the object pass through the bottom of camera. You needn't rotate 180 degrees in pan direction to keep observing the object. This function will do this for you quickly.
8. **Auto-Pan** function enable dome camera to scan a specific region repeatedly with user defined speed. You can set start point, end point and scan speed to scan a specific region. User can make dome camera to do continuously panning without limit through setting the start point the same as end point
9. **Sequence** function enable dome camera to switch viewpoints between presets. There are three parameters can be filled into sequence function. You can set "Preset number", "Dwell Time" and "Speed" for sequence line.
10. **Cruise** function enable dome camera to scan a user defined path. User can manipulate dome camera with joystick to establish this path.
11. **Home** function enables the possibility to lock a viewpoint or a function. Home function will go back to home position or functions (Auto-pan/ Sequence/ Cruise) when user move the camera to other position and the time period is expired.
12. **Auto Restoring** function will record current position when user defined period of time is reached. Dome will go to the position if the power of your installation site is recovery after shutdown.
13. **Remote V-Sync Adjustment** function enable user to adjust the line lock signal remotely. You can adjust the phase of line lock signal to synchronize the system from keyboard.
14. **D Protocol and P Protocol Supported from OSD.** You can control our dome camera easily from any keyboard of **PELCO (Pelco Corporation)**.
15. **VCL Telemetry Control Protocol Supported from OSD.** You can control our dome camera easily from system of **DM (Dedicated Micros Corporation)**.
16. Remote control via RS-485
17. Build-in 4 alarm input connectors
18. On Screen Display for camera control
19. 24VAC power model for easy installation
20. Twist lock release from bracket for easy installation and servicing

PRECAUTIONS

1. Handle the camera carefully

Do not abuse the camera. Avoid striking, shaking, etc. The camera could be damaged by improper handling or storage.

2. DO NOT disassemble the camera

To prevent electric shock, do not remove screws or covers. There are no user serviceable parts inside. Ask a qualified service person for servicing.

3. Do not operate the camera beyond the specified temperature, humidity or power source ratings

Use the camera under conditions where temperature is between -30°C ~ 45°C (-22°F ~ 104°F), and humidity is below 90%.

4. Do not use strong or abrasive detergents when cleaning the camera body

Use a dry cloth to clean the camera when dirty. In case the dirt is hard to remove, use a mild detergent and wipe gently.

5. Never face the camera towards the sun

Do not aim the camera at bright objects. Whether the camera is in use or not, never aim it at the sun or other extremely bright objects. Otherwise, blooming or smear may be caused.

* **PELCO** is a registered trademark of **PELCO** Corporation.

* **P protocol** and **D protocol** are protocols what **PELCO** corporation used.

* **DM** is a registered trademark of **Dedicated Micro** Corporation.

QUICK STARTING

The section is a quick reference for users to manipulate a dome camera in a short time. We explain the operational method through different keyboards.

FUNCTION DEFINITION

■ Preset Function Definition

Preset point means that dome camera will save pan/tilt/zoom positions to its memory. You can recall the preset position through this function.

■ Auto-Pan Function Definition

Auto-Pan means that dome camera will scan a predicted region. The region is defined by “start point”, “end point”, “scan direction” and “scan speed”.

Dome camera will scan a region from “start point” to “end point” according to the “scan direction” and “scan speed”.

Dome camera will do pan motion continuously without limit if user set the start point the same as end point.

You can manipulate zoom in/out function when the dome camera is executing Auto-Pan function.

■ Sequence Function Definition

Sequence means that dome camera will switch its view between different preset positions.

The sequence parameters are “preset point”, “jump speed” and “dwell time”.

Dome camera will switch its view according to the sequence parameters. It will go to the “preset position N” with “jump speed S” and stay there for a period with “dwell time T”. Then dome camera will go to the second preset position with the parameter 2....etc.

■ Cruise Function Definition

Cruise means that dome camera will patrol a special path. This path is generated by joystick movement. The memory sizes of dome camera limit the length of cruise path. After the memory of dome camera is filled up, it will stop to record the latter path. When you recall cruise function, it will patrol the path which is stored in memory.

QUICK START FROM ESD-CC1 KEYBOARD

Please press **<DOME>** button and enter the ID of dome to start to control the selected dome camera.

■ Preset Function Operation

■ Setting

Press a number key for preset point such as **<2>**. Press **<SET PRESET>** to record this position as preset point 2.

■ Recall preset position

Press a number key for preset point such as **<2>**. Press **<GO PRESET>** to go to the preset position 2.

■ Auto-Pan Function Operation

■ Setting

1. Press **<AutoPan>** to entering Auto-Pan mode. The LCD on keyboard will display "1.RUN 2.SETTING".
2. Press **<2>** to edit parameters of Auto-Pan.
3. Move dome camera to a specific position and press **<ENTER>** to save it as start point of scan region.
4. Pan dome camera to another position and press **<ENTER>** to save it as end point of scan region.
5. Using direction key to select the scan direction what you want. Press **<ENTER>** to confirm this selection.
6. Using direction key to select speed of Auto-Pan. Press **<ENTER>** to confirm this selection.

■ Execute Auto-Pan function

1. Press **<AutoPan>** to entering Auto-Pan mode. The LCD on keyboard will display "1.RUN 2.SETTING".
2. Press **<1>** to execute Auto-Pan function.

■ Sequence Function Operation

■ Setting

1. Press a number key to set a sequence line such as <1>. Press <SET SEQ.> to start modifying parameters of sequence 1.
2. LCD is displaying "001. PST SPD DWELL" now. You can edit the parameters such as <4> <ENTER> for PST, <1> <5> <ENTER> for SPD and <5> <ENTER> for DWELL. That means that the first preset point for sequence 1 is preset point 4, dome camera will staying 5 seconds there and dome will go to next preset with speed 15.
3. LCD is displaying "002.PST SPD DWELL" now. Please edit the parameters.
4. LCD is displaying "003.PST SPD DWELL" now. Please press <SETUP> to end the session if you need two presets only.

- Execute sequence function

1. Press a number key to specify a sequence number what you want to execution.
2. Press <RUN SEQ.> to start sequence function.

- **Cruise Function Operation**

- Setting

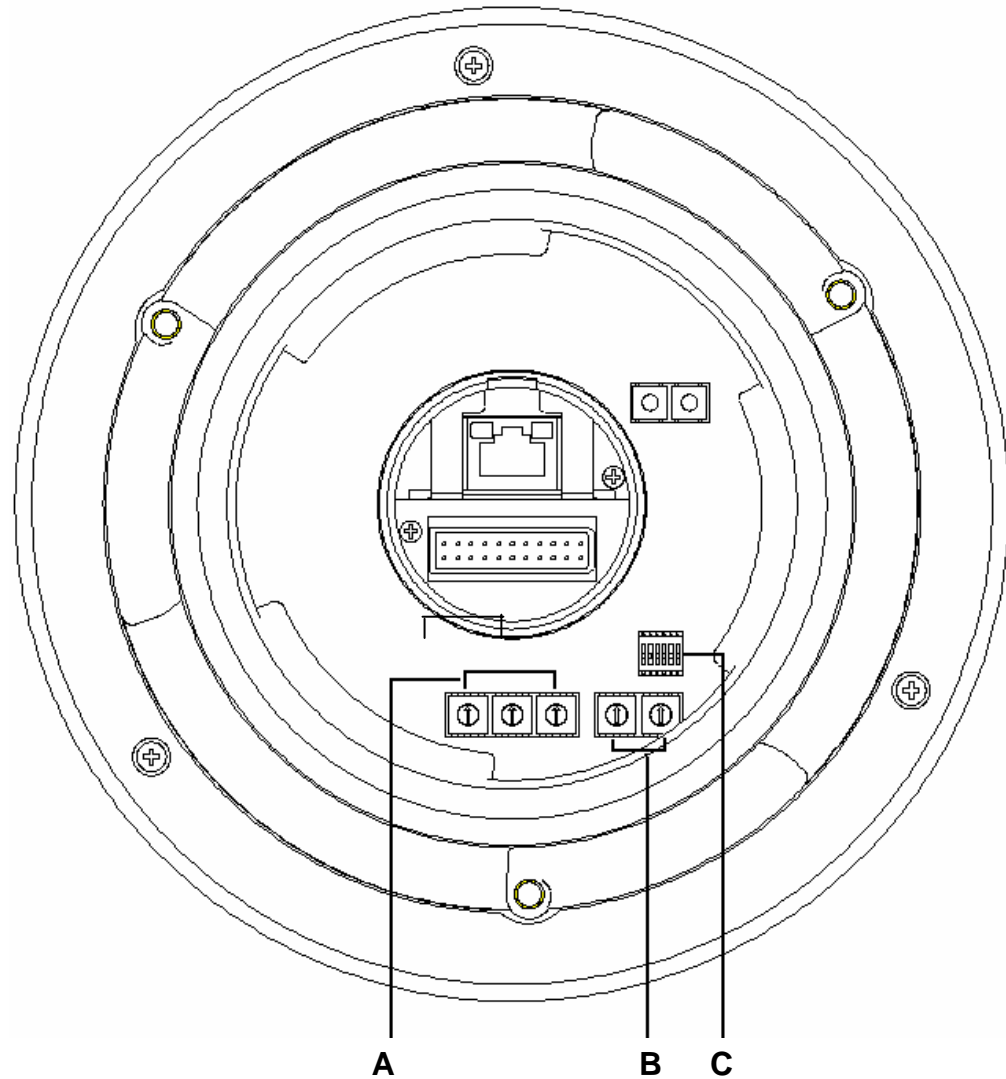
1. Press <CRUISE> key on keyboard to select execution mode of cruise function.
2. LCD is displaying "1. RUN 2.SETTING" now. Press <2> to enter modification mode.
3. LCD is displaying "ENTER for START POS". Press <ENTER> to start to input cruise path.
4. LCD is displaying "ENTER for END POS". You can move dome camera to patrol a path. Press <ENTER>
5. LCD is displaying "ENTER for SAVING". Press <ENTER> to command dome camera recording this cruise path.

- Execute cruise function

1. Press <CRUISE> key on keyboard to select execution mode of Cruise function.
2. LCD is displaying "1. RUN 2.SETTING" now. Press <1> to start cruise function.

SWITCH SETTING

SWITCH DEFINITION



- A. ID Setting (SW1~SW3)**
- B. Dome Control Protocol**
- C. RS-485 Setting**

ID Setting

Use SW1 ~ SW3 to change your speed dome ID by turning the arrow to the desired number respectively.

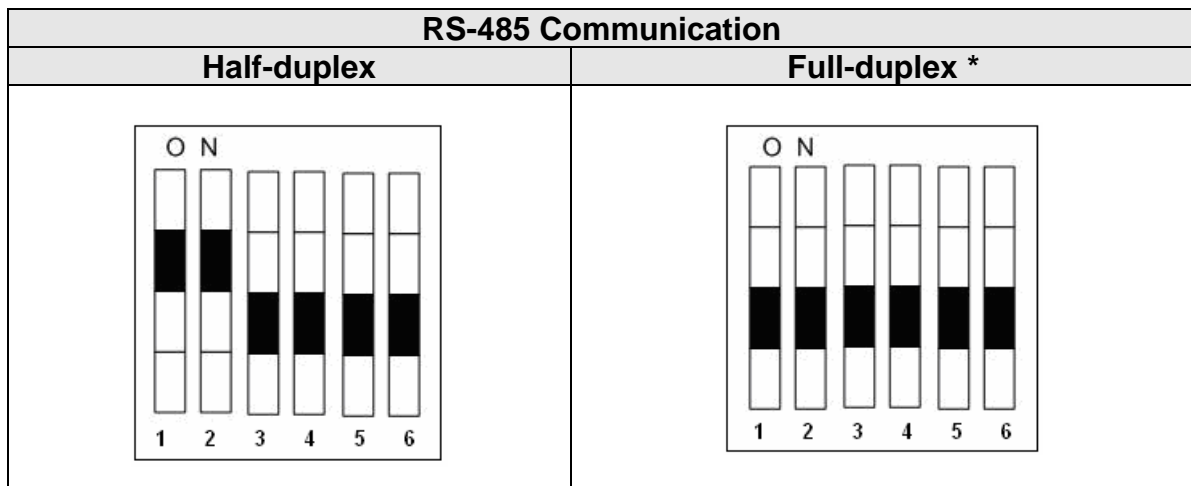
Dome Control Protocol

Refer to below table and turn the arrow to choose a protocol for your speed dome.

SW No.	Protocol	SW No.	Protocol	SW No.	Protocol
00	VCL	06	None	12	None
01	Pelco D	07	ELMO	13	None
02	Pelco P	08	AD 422	14	None
03	None	09	DS2P Pelco P	15	None
04	Chiper	10	None		
05	Philips	11	Simplex DSCP		

RS-485 Setting

Refer to below table for desired RS-485 settings of your dome camera.

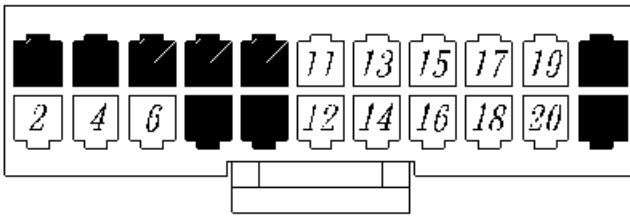


***Pin 3: Termination (OFF for Default Setting)**

Pin 4: Line Lock (OFF for Default Setting)

Pin 5: Simplex (OFF for Default Setting)

Alarm Pin Definition



PIN	顏色	名稱
2	White	ALMNO
4	Black	ALMNC
6	Green	ALMCOM
11	Green/Black	ISOG
12	Purple	ALM-1
13	Gray	ALM-2
14	Red	ALM-3
15	Blue	ALM-4
16	Blue/White	ALM-5
17	Brown/White	ALM-6
18	Red/White	ALM-7
19	Purple/White	ALM-8
20	Black/White	ALMGND

INSTALLATION

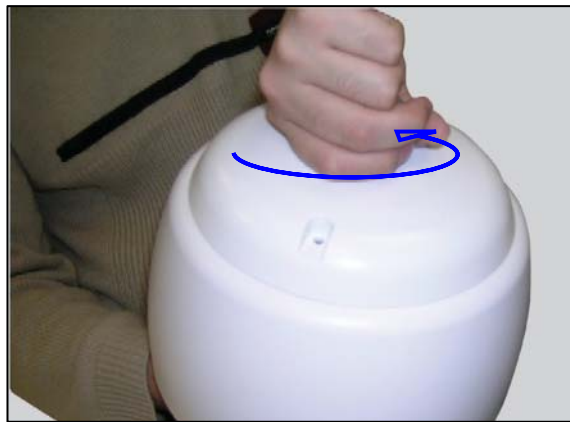
STEP 1:

Unpack the dome package and take out the dome bodies.



STEP 2:

Rotate the top holder and take it off from the upper dome body.



STEP 3:

Rotate the smoke bubble and remove it.



STEP 4:

Now install the dome cover to protect the camera lens.

Before actually doing that, apply some lubricant on all surface of water-proof rubber on the upper dome body to make the installation process smoother.



Note that the tiny protrusion on upper dome body must match to one of the four holes on lower dome body.



Gently pressure the upper dome body downward with two hands on the side of the cover.



DO NOT press the cover as shown in the picture on the right hand side; this might cause the damage on the dome body.



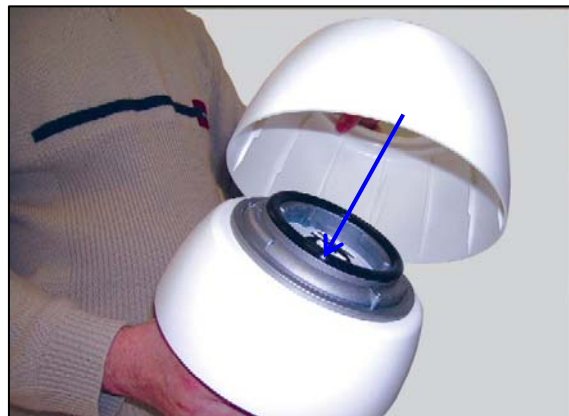
STEP 5:

Screw the two dome bodies together. It should be done if the lower dome body looked swelled.



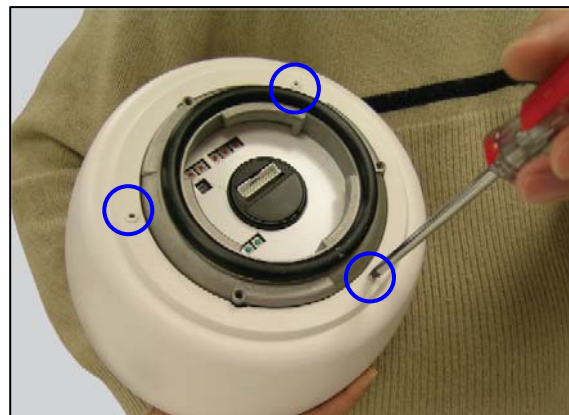
STEP 6:

If needed, assemble the sunshield for outdoor use.



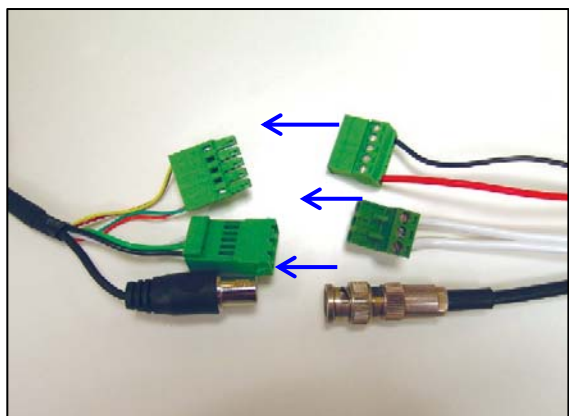
STEP 7:

Fix the sunshield to the dome with three screws.



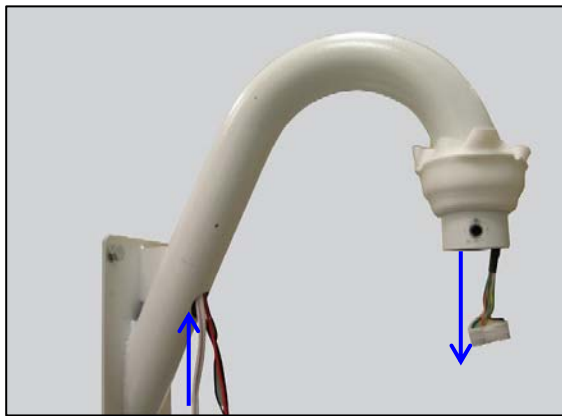
STEP 8:

Connect the attached RS-485, power and BNC cables with your arranged cables.



STEP 9:

Put the cables through the gooseneck and top holder.



the



STEP 10:

Mount the top holder to the gooseneck and rotate the top holder clockwise.



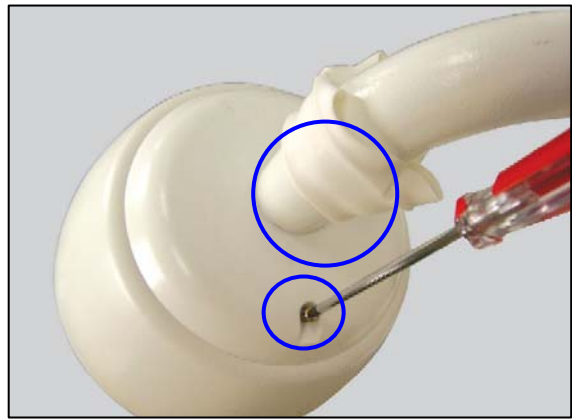
STEP 11:

Then connect the cables to the dome body.



STEP 12:

Mount and screw the dome to the top holder.
Put on the rubber lastly.



Completion:

ESD-380

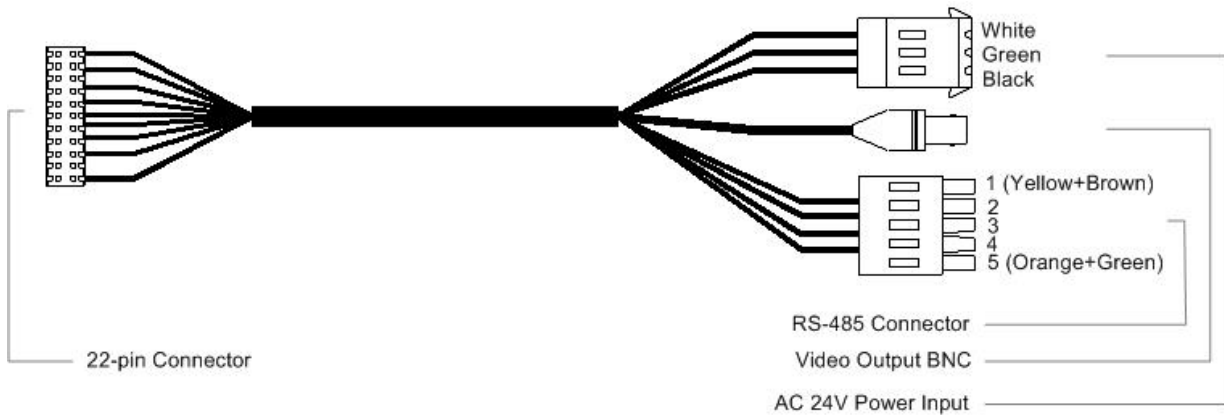


ESD-380 with sunshield



CONNECTION

CABLE CONNECTION



22-PIN CONNECTOR DEFINITION

The definitions of the pins on the 22-pin connector are listed as below table.

No.	Pin	Color	Cable
1	AC24-1	White	1007 20AWG
2	Empty		
3	AC24-2	Black	
4	Empty		
5	FG	Green	
6	Empty		
7	T+	Yellow	1007 24AWG
8	R-	Orange	
9	T-	Green	
10	R+	Brown	
11-20	Empty		
21	VGND		
22	Video		

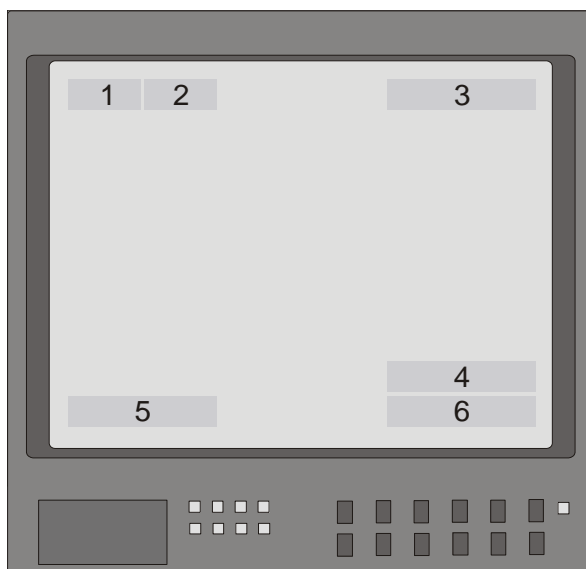
RS-485 Connector

Please connect keyboard to Speed Dome through the terminal block. The communication interface between Speed Dome and Keyboard is RS-485. Maximum cable length for RS-485 communication over 24-gauge wire is 4000 feet (1219 meters). The recommended cable for RS-485 communication is **CAT 5** cable.

Definition	Cable Color
T+ (D+)	Yellow
R- (D-)	Orange
T- (D-)	Green
R+ (D+)	Brown

OSD DISPLAY FORMAT

OSD DISPLAY FORMAT



< Fig1. OSD DISPLAY POSITION >

POSITION	FUNCTION	OSD DISPLAY	DESCRIPTION
1	FOCUS MODES	A	Auto Focus Mode
		M	Manual Focus Mode
2	BACKLIGHT	X	Back Light Compensation OFF
		B	Back Light Compensation ON
3	ALARM	ALARM	Alarm Message
4	ZOOM RATIO	X1	Present Zoom Ratio
5	TITLE	1. Max. 20 letters for each title. 2. 16 sets of titles are available.	
6	CAMERA ID	Show the camera ID of this camera	

SPECIFICATIONS

GENERAL FEATURES

Environment	Indoor / Outdoor
Controller I/F	RS-485
Operating Temperature	-30° – 45 °C
Power Source	24 VAC
Max Power Consumption	52W
Dimensions	w/o Sunshield: 234 x 305mm w/ Sunshield: 263 x 305mm
Weight	5.8kg

ROTARY BODY FEATURES

Environment	ESD-380	
Pan Travel	360 Degree Endless	
Tilt Travel	-99 ~ 99 Degree	
Manual Speed	1~90 Deg/s	
Preset Speed	Pan	1~375 Deg/s High Resolution
	Tilt	6~360 Deg/s Standard

Standard: 768 steps/circle High Res.: 1600 steps/circle

CONTROL FEATURES

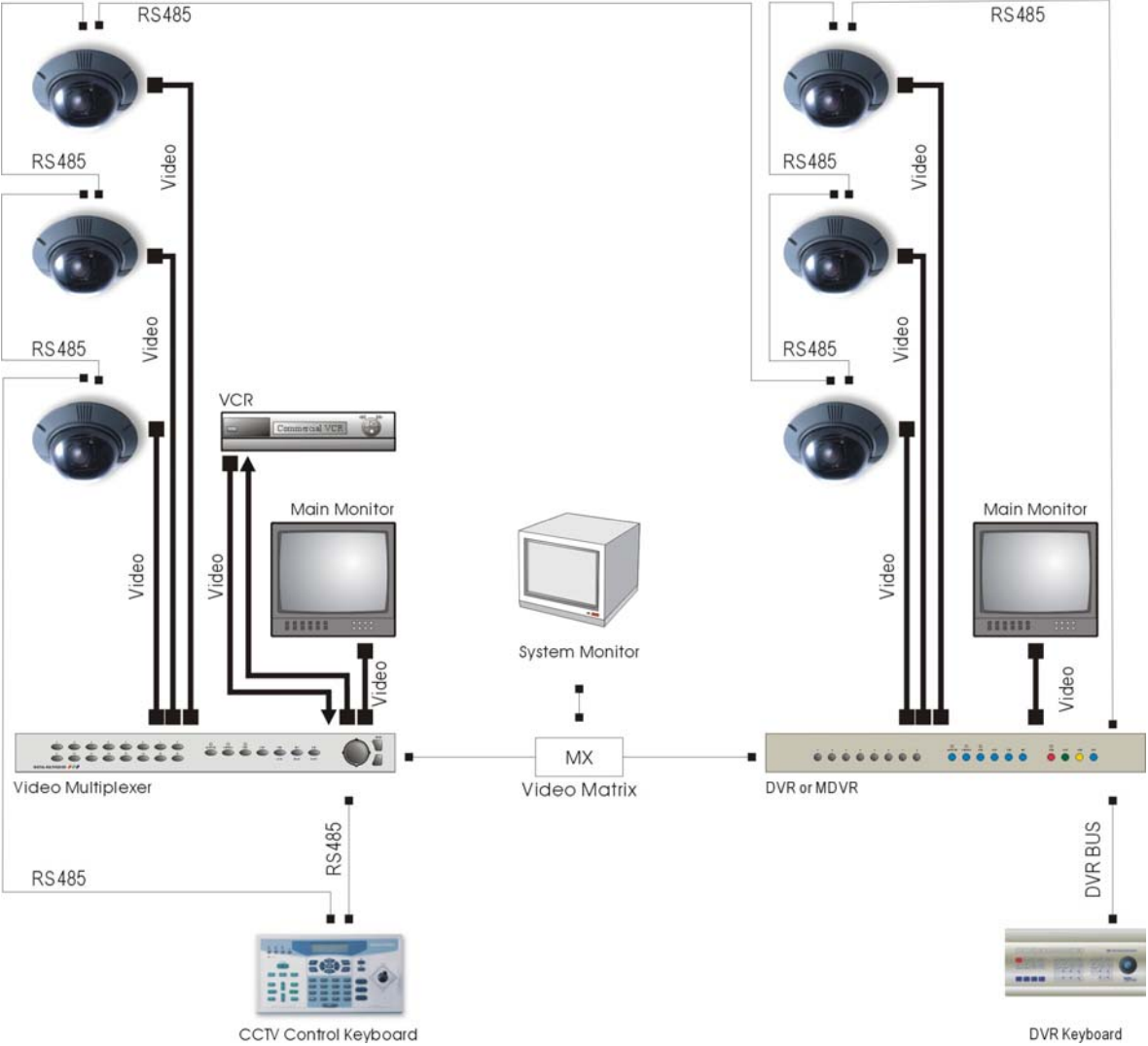
Camera Module Type	ESD-380	
	S	DR
D&P protocol	YES	YES
Presets	128	128
Preset Accuracy	0.5	0.5
Patterns	1	1
Sequence	4	4
Auto-Pan	1	1
Masking	X	8
Proportional Pan & Tilt	YES	YES
Zone Title	YES	YES
Home Function	YES	YES
P/T/Z Auto-restoring	YES	YES
Auto-Turn Around	YES	YES
Digital Flip	X	YES
DSS	X	YES
IR	X	YES
WDR	X	YES
Motion Detection	X	X

CAMERA FEATURES

Module Type	ESD-380S	ESD-380DR
Total Pixels	NTSC 811(H)X 508(V)	NTSC 758(H)X 504(V)
	PAL 795(H)X 596(V)	PAL 758(H)X 592(V)
Effective Pixels	NTSC 768(H)X 494(V)	NTSC 724(H)X 494(V)
	PAL 752(H)X 582(V)	PAL 724(H)X 582(V)
Scanning Area	1/4" CCD	
Scanning system	PAL , NTSC , 2:1 interlace	
Synchronization	Internal / Line Lock	
Video Output	1.0Vpp/75 Ω , BNC	
Horizontal Resolution	NTSC:470 TV lines.	NTSC:470 TV lines
	PAL:460 TV lines.	PAL:470TV lines
S/N Ratio	50dB	50dB
Minimum Illumination	1 lux	0.01 lux
		0 lux (IR illuminator)
Focal length	4~88 mm	3.6~82.8 mm
Zoom ratio	22x optical zoom	23x optical zoom
Digital Zoom	X1 ,X12 variable	X1 ,X12 variable
Zoom Speed	3.9 sec / 6.3 sec	2.9 sec / 5.8 sec
Focus Mode	Auto / Manual	
White Balance	Auto / Manual	
Iris Control	Auto / Manual	
Electronic shutter	NTSC (1/60~1/30k sec)	NTSC (1/2~1/30k sec)
	PAL (1/50~1/30k sec)	PAL (1/1.5~1/30k sec)
BLC	On/Off	

SYSTEM ARCHITECTURE

SYSTEM ARCHITECTURE



APPENDIX - OSD MENU

This camera utilizes a user setup menu that is displayed on-screen. This setup menu contains various sub menus that form a tree-type structure as shown below. This menu is described in the "SETUP MENU DESCRIPTION"

OSD TREE STRUCTURE

DEFAULT	ON		
	OFF		
BACKLIGHT	ON	BLC LEVEL	000 ~ 100
	OFF		
FOCUS	AUTO	Focus Length: 1cm 10cm 30cm 1m	
	MANUAL		
APERTURE	AUTO		
	MANUAL	H APERTURE	000 ~ 031
		V APERTURE	000 ~ 031
AE MODE	AUTO	IRIS OFFSET	000 ~ 100
	SHUTTER	SHUTTER SPEED	
	IRIS	IRIS	
	AGC	AGC	
WBC MODE	AUTO		
	MANUAL	R GAIN	
		G GAIN	
ID DISPLAY	ON		
	OFF		
SETUP MENU	ENTER	FLIP	IMAGE
			ME
			OFF
		ZOOM SPEED	FAST
			SLOW
		SPEED BY ZOOM	ON
			OFF
		AUTO CALI.	ON
			OFF
		DIGITAL ZOOM	1-12 (S model)
			1-12 (DR model)
		SLOW SHUTTER	1/2~1/60 (NTSC)
			1/1.5~1/50 (PAL)
		ANGLE ADJUSTER	ADJUST MIN ANGLE
ADJUST MAX ANGLE			
RESET			
RESET	YES		
EXIT			

TITLE	ON		
DISPLAY	OFF		
TITLE SETTING	000 ~ 016		
ALARM SETTING	ENTER	ALARM PIN	1 ~ 4
		ALARM SWITCH	OFF ON
		ALARM TYPE	N.O. N.C.
		ALARM ACTION	POINT SEQUENCE POINT
		PRESET POS	001 ~ 128
		SEQUENCE LINE	1 ~ 4
		DWELL TIME	001~ALWAYS SEC.
		EXIT	YES
		HOME SETTING	ENTER
SELECT MODE	PRESET SEQUENCE AUTO-PAN CRUISE		
RETURN TIME	1 ~ 127 MIN.		
PRESET/ AUTOPAN/ SEQUENCE/ CRUISE			
GO	ENTER		
EXIT			
SEQUENCE	ENTER	SEQUENCE LINE.	1 ~ 4
		SEQUENCE POINT	1 ~ 32
		PRESET POS.	1 ~ 128
		SPEED	1 ~ 15
		DWELL TIME	1 ~ 127
		RUN SEQUENCE	ENTER
		EXIT	
AUTOPAN	ENTER	START POINT	TO FIND TO SAVE
		END POINT	TO FIND TO SAVE
		DIRECTION	RIGHT LEFT
		SPEED	1 ~ 4
		RUN AUTOPAN	ENTER
		EXIT	
CRUISE	ENTER	RECORD START	ENTER
		RECORD END	ENTER
		RUN CRUISE	ENTER
		EXIT	

IR FUNCTION	AUTO	THRESHOLD	LOW. MID. HI.
		IR COLOR	B/W. COLOR
		EXIT	
	ON		
	NONE (22X)		
WDR SETTING	ENTER	WDR SWITCH	ON/OFF
		WDR FUNCTION	AUTO
			MANUAL
	EXIT		
	NONE (22X)		
PRIVACY	ENTER	PRIVACY SWITCH	OFF / ON
		SHADE	GRAY / WHITE /BLACK
		SET MASK	1 / 2
		RESET	YES
		EXIT	YES
	NONE (22X)		
EXIT OSD	YES		

OSD MENU

There are two pages of OSD setup menu allow users to control the camera parameters, these functions are described in the following sections in detail. Please use LEFT/ RIGHT/ UP/ DOWN of direction keys to select your parameters.

MENU ITEM

1. DEFAULT

If you select ON for this item, all the camera parameters will be restored to the factory initial (default) data. Once you modify any of the following items, this item becomes OFF.

2. BACKLIGHT

In case that excessive light is behind the center object, it is necessary to prevent the center object too dark.

Turn this item ON, the center object will be brighten in contrast to the edge of the picture (where a backlight would most likely be located).

3. FOCUS

The focus of the dome camera can be operated in two different modes: 'Manual Focus mode' and 'Auto Focus mode'.

Manual

Users can the move focus lens by pressing the "focus Near/Far button" on the control keyboard.

Auto

The optimum focus is achieved by the internal digital circuit. User can limit the minimum auto focus range through selecting a suitable item for some special condition.

4. APERTURE

You can edit the aperture setting of camera module.

AUTO

Camera will automatically assign a suitable aperture value for camera to achieve a better image.

MANUAL

You can set aperture value with higher value to enhance the incident ray of camera.

5. AE MODE

Here you can select how the auto exposure function works, five options are available in this item, they are explained in the following section:

AUTO

With this option, the camera's Shutter, IRIS and AGC control circuits work together automatically to compensate the light exposure of CCD sensor, in order to get consistent video output level. IRIS OFF SET is used to set the level of IRIS variation.

SHUTTER

With this option, the SHUTTER priority is higher than IRIS and AGC circuit will function automatically to get consistent exposure.

IRIS

With this option, the IRIS priority is higher than SHUTTER and AGC circuit will function automatically to get consistent exposure. After the IRIS is selected manually, the action of exposure compensation depends on the AGC circuit.

AGC

With this option, the AGC priority is higher than SHUTTER and IRIS circuit will function automatically to get consistent exposure. After AGC is selected manually, the action of exposure compensation depend on changing the IRIS of Lens

6. WBC MODE

You can select one of six White Balance Control modes as described follows:

AUTO

In this mode, white balance works within its color temperature range.

MANUAL

In this mode, you can control the Write Balance value manually, R gain and B gain adjustable range from 0 to 100.

7. ID DISPLAY

You can display the ID of dome on monitor or not.

ON

Display the ID address of this dome.

OFF

Do not display the ID address of this dome.

8. SETUP

You can adjust some parameters under SETUP item.

FLIP (IMAGE/ ME/OFF)

User can track an object continuously when it passes through under dome camera with setting flip item to IMAGE/ ME.

IMAGE item enable user to keep tracking object seamlessly through image flip technology. ME item is a standard function which is the same as AUTO-FLIP function.

ZOOM SPEED

You can select a suitable zoom speed.

SPEED BY ZOOM

The tracking speed is adjusted by internal algorithm. The lager zoom ratio the lower rotation speed.

AUTO CALI.

The default setting is OFF.

DIGITAL ZOOM

Digital zoom ratio is adjustable from 1 to 12.

SLOW SHUTTER

You can set the slowest shutter speed. With the slowest shutter speed, you can see objects in a dark environment under 0.2 lux. With a higher shutter speed, you can see a smooth video image from camera

ANGLE ADJUSTER (MIN/ MAX)

User can see more area higher if they adjust the MAX angle to +99 degree. User can see more area lower if they set the MIN angle to -10 degree.

RESET

Reset the Speed Dome.

EXIT

Exit the SETUP menu.

9. TITLE DISPLAY

You can turn on or off the TITLE DISPLAY function of this dome

ON

It will display a mark what you input for this view when you came back to the view.

OFF

It will not display any mark what you input for this view when you came back to the view.

10. TITLE SETTING

You can name a view for dome camera and it will display the name when you came back to the view.

STEP 1: Operate dome to a view what you want to name it.

STEP 2: Turn on OSD and move blink words to "TITLE SETTING"

STEP 3: Select a number what you want to name it.

STEP 4: Press <ENTER> to go into edit mode.

SET TITLE: (XXX)

0	0 1 2 3 4 5 6 7 8 9	S:SAVE
1	A B C D E F G H I J	/S:EXIT
2	K L M N O T P Q R S	←:LEFT
3	U V W X Y Z : / . ,	→:RIGHT
4	() + ? - SP	

TITLE:

X

STEP 5: Choose a character what you want to input with direction key and press <ENTER>.

Example: A <ENTER>, B <ENTER>, C <ENTER>

TITLE: ABC

STEP 6: Move blink character to "S: SAVE" and press <ENTER> to save setting.

You can erase the word what you don't like it through move blink character

to "SP" and press <ENTER>

11. ALARM SETTING

Alarm parameters can be set on this page.

ALARM PIN

Choose an alarm connector what you want to set its status.

ALARM SWITCH

Turn ON/ OFF alarm function.

ALARM TYPE

There are two kind of alarm types can be selected. One is normal open the other is normal close.

ALARM ACTION

User can choose what kind of action should be executed when the alarm condition taken place. There are two kind of alarm actions can be set. One is go to a specific position when alarm taken place. The other is executing sequence function when alarm condition taken place.

Point Mode

PRESET POS.

Enter a preset position where the dome will go to when alarm pin is triggered.

Sequence Mode

SEQUENCE

Enter the sequence line you wish the Dome execute when alarm pin is triggered.

DWELL TIME (Seconds)

Camera will stay at the preset position for "DWELL TIME" seconds then go back to previous position. If you select "Always", dome will go to the preset position and stay there until alarm condition is released or user move its joystick on keyboard.

EXIT

Quit the ALARM SETTING menu.

12. HOME SETTING

Home parameters can be set on this page.

HOME FUNC

Turn home function on or off.

SELECT MODE (AUTOPAN/ SEQUENCE/ CRUISE/ PRESET)

Dome will go to execute this mode function when home function is enabled and the "RETURN TIME" is reached.

RETURN TIME (MINUTES)

Dome will start to count "RETURN TIME" when user move the camera to arbitrary position.

AUTOPAN/ SEQUENCE LINE/ CRUISE/ PRESET POS

This item is detailed mode setting of home function. This item will vary with 'SELECT MODE' item.

GO.

Go to execute home function (**HOME FUNC ON only**).

EXIT

Exit the HOME SETTING menu.

13. SEQUENCE

Sequence parameters can be set on this page.

SEQUENCE LINE

There are four sets of sequence lines built in dome camera. You can choose a line to execute. Please use LEFT/ RIGHT of direction key to select your sequence line.

SEQUENCE POINT

There are 32 sets of sequence points can be specified in every sequence line. The sequence points are linked list. Sequence function will go through the linked list again and again.

PRESET POSITION

You can specify a preset position where the dome should go to at this sequence point.

SPEED

Speed is adjustable from 1~15.

DWELL TIME

Dome will stay on the sequence point for "DWELL TIME" then go to next sequence point.

RUN SEQUENCE

User can command dome camera to execute sequence function.

EXIT

Exit the SEQUENCE menu.

14. AUTOPAN

AutoPan parameters can be set on this page. User can enable dome camera to do continuously panning without limit through setting the start point the same as endpoint.

START POINT

Start position of the "AUTOPAN path".

TO FIND: Press 'ENTER' to go into joystick mode. User can move camera to suitable position under joystick mode.

TO SAVE: Press 'ENTER' to set this position as start point and escape joystick mode.

END POINT

End position of the "AUTOPAN path".

TO FIND: Press 'ENTER' to go into joystick mode. User can move camera to suitable position under joystick mode.

TO SAVE: Press 'ENTER' to set this position as end point and escape joystick mode.

DIRECTION

Rotational direction of dome camera.

SPEED

AUTOPAN function will rotate camera with this speed.

RUN AUTOPAN

Execute AUTOPAN function.

EXIT

Quit the AUTOPAN menu.

15. CRUISE

Cruise parameters can be set on this page.

RECORD START

Command dome to start to record "CRUISE PATH".

STEP1: Press 'ENTER' to go into joystick mode. Dome will move blink words to 'RECORD END' automatically.

STEP2: User can move camera to form a path.

STEP3: Press 'ENTER' to save the path.

RECORD END

Command dome to stop to record "CRUISE PATH".

RUN CRUISE

Execute "CRUISE" function.

EXIT

Quit the CRUISE menu.

16. IR FUNCTION

"IR Cut Filter" function can be set on this page.

AUTO

THRESHOLD: The Internal circuit will decide to remove the "IR Cut Filter" according to its threshold value. You can set the sensitivity as high then dome will remove the filter immediately if the threshold value is reached. Of course, low sensitivity can improve the reliability of lens.

IR COLOR: You can program the video output as color or B/W when IR function is enabled.

ON

Turn on IR function.

17. WDR SETTING

The parameter of WDR (Wide Dynamic Range) function can be set on this page.

WDR SWITCH

You can turn on/off the WDR function.

WDR FUNCTION

You can edit all parameters of WDR by yourself.

EXIT

Exit this page.

18. PRIVACY

You can program the privacy zone position with this option.

PRIVACY SWITCH

You can display “Privacy masks” with this option.

SHADE

The color of privacy mask can be selected through this option.

SET MASK

After you press “ENTER” on this item, dome will memory this position as “privacy mask position”. You can select form Mask1 to Mask8 for this item.

MASK MENU

H CENTER 000~100

The original center of mask zone is the center of screen. User can move the center of mask zone to another position through adjust this value.

V CENTER 000~100

The original center of mask zone is the center of screen. User can move the center of mask zone to another position through adjust this value.

H SIZE 000~100

User can adjust the horizontal size of “privacy mask” through this item.

V SIZE 000~100

User can adjust the vertical size of “privacy mask” through this item.

EXIT+SAVE

Exit this page and save the privacy zone data into dome camera.

EXIT

Exit this page.

19.EXIT OSD

You can exit OSD mode with this item. Of course, you can close the OSD menu through “ESC” button on ESD-CC1.

APPENDIX - PELCO

The Speeddome can be controlled through a keyboard which built in **D protocol** and **P protocol**. Please follow the instruction to manipulate our Speeddome with a keyboard which built in D protocol and P protocol.

SYMBOL DEFINITION

<Preset Go>	A single button which can command a dome to go to specific preset position.
<Preset Set>	(1) A single button which can set preset parameter (D Protocol). (2) A virtual button which is pressing <Preset Go> for 3 seconds to set preset parameter (P Protocol).

SPECIAL FUNCTION

7 7 <Preset Go>	(1) It can set display or close an OSD menu. (2) It is a virtual key to emulate "ENTER" button.
7 8 <Preset Go>	Reset Dome Camera

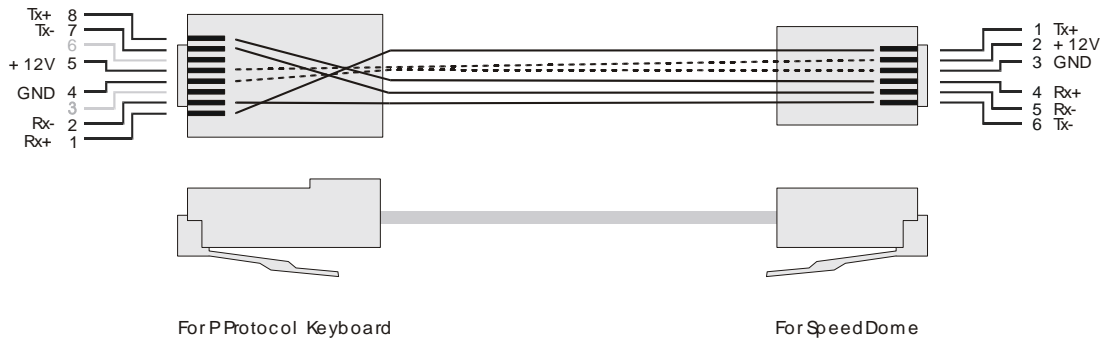
USING "PELCO KB" CONTROL DOME CAMERA

1. Some differences between different keyboards when OSD is open.
 - P protocol keyboard can move cursor up/ down/ right/ left with pushing joystick up/ down/ right/ left.
 - D protocol keyboard can move cursor up/down with pushing joystick up/down. But D protocol keyboard can move cursor right/ left with pushing joystick right/ left plus press button on joystick.
2. Some differences for 'ENTER' command.
 - P/D protocol keyboard couldn't issue 'ENTER' command directly. You can send a 'ENTER' command through " 7 7 <Preset Go> ".

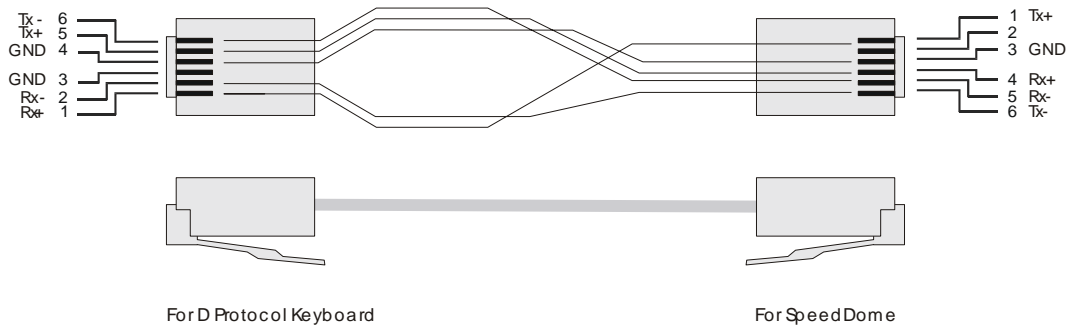
CABLE LENGTH

The communication interface between Speed Dome and Keyboard is RS-485. Maximum cable length for RS-485 communication over 24-gauge wire is 4000 feet (1219 meters). CAT 5 cable is recommended.

CABLE DEFINITION (P Protocol Keyboard to Speed Dome)



CABLE DEFINITION (D Protocol Keyboard to Speed Dome)



APPENDIX - PHILIPS ALLEGIANT

The dome cameras can be integrated into Philips Allegiant systems through A repeater.

Please follow the instructions to control dome cameras through Philips Allegiant systems.

SYMBOL DEFINITION

<shot>	A physical single button : Command dome cameras to go to specific preset position.
<set>	A physical single button : Set preset position.

SPECIAL FUNCTION

7 6 <set>	1. Exit OSD menu direct
7 7 <set>	1. Open or close OSD menu. 2. Virtual key to send an "ENTER" command when OSD is opened.
7 8 <set>	1. Reset Doma camera.
<Iris Open>	A physical single button : Send an "ENTER" command when OSD is opened.

USING "ALLEGIANT KB" CONTROL DOME CAMERAS

1. Some differences between different keyboards when OSD is opened.
 - User can move cursor left/right/up/down through pushing joystick left /right/up/down.
2. Some differences for 'ENTER' command.
 - User cannot send 'ENTER' command directly. User can send a 'ENTER' command through " 7 7 <Set> ".



1478 Old Country Rd.
Plainview, NY 11803
www.elmoussa.com